

Amendments to the Claims

Claim 1 (currently amended): A water control fixture, comprising:

an operating valve in said water control fixture for controlling the flow of water from a pressurized supply of hot water; and

a thermostatically controlled bypass valve disposed in said water control fixture, said bypass valve having a thermally sensitive actuating element therein configured to bypass water from said supply of hot water to a supply of cold water until the temperature of the water is at a preset level, said actuating element being insulated.

Claim 2 (original): The water control fixture according to claim 1, wherein said actuating element comprises an actuating body and a rod member, said rod member configured to operatively extend from said actuating body and seal said bypass valve.

Claim 3 (original): The water control fixture according to claim 2, wherein said rod member has a reduced diameter section to allow for lime buildup.

Claim 4 (original): The water control fixture according to claim 2 further comprising a sharp cornered guide bore on said actuating body.

Claim 5 (original): The water control fixture according to claim 4, wherein said rod member has a reduced diameter section to allow for lime buildup.

Claim 6 (original): The water control fixture according to claim 1, wherein said actuating element is a wax-filled cartridge actuator.

1 Claim 7 (cancelled)

2  
3 Claim 8 (previously amended): The water control fixture according to claim 1 further comprising a  
4 screen disposed in a hot water inlet of said water control fixture so as to be cleaned by the movement  
5 of water from said pressurized supply of hot water when said operating valve is open.

6  
7 Claim 9 (original): The water control fixture according to claim 1 further comprising a bias spring  
8 disposed in said bypass valve between said valve seat and said actuating body to urge said rod  
9 member toward said actuating body to open said valve seat.

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11 Claim 10 (original): The water control fixture according to claim 1 further comprising a check valve  
12 disposed in said bypass valve.

13  
14 Claim 11 (original): The water control fixture according to claim 1 further comprising a housing  
15 with an interior chamber disposed in said housing, said interior chamber hydraulically connected to  
16 said supply of hot water, said bypass valve disposed in said interior chamber.

17  
18 Claim 12 (original): The water control fixture according to claim 11, wherein said bypass valve is  
19 disposed in a cartridge configured to fit within said interior chamber.

20  
21 Claim 13 (original): The water control fixture according to claim 11, wherein said bypass valve is  
22 removably disposed in said interior chamber.

23  
24 Claim 14 (original): The water control fixture according to claim 13, wherein said bypass valve is  
25 removable through the top of said water control fixture.

1 Claim 15 (original): The water control fixture according to claim 11, wherein said housing  
2 interconnects said supply of hot water and said supply of cold water.

3  
4 Claim 16 (original): The water control fixture according to claim 15, wherein said housing further  
5 comprises a hot water cross passage interconnecting said interior chamber with hot water conduit  
6 located in said housing, said hot water conduit connected to said supply of hot water.

7  
8 Claim 17 (original): The water control fixture according to claim 16, wherein said housing further  
9 comprises a cold water cross passage interconnecting said interior chamber with a cold water conduit  
10 located in said housing, said cold water conduit connected to said supply of cold water.

11  
12 Claim 18 (original): The water control fixture according to claim 17, wherein said interior chamber  
13 interconnects said hot water cross passage and said cold water cross passage, said bypass valve  
14 configured to bypass water from said hot water cross passage to said cold water cross passage.

15  
16 Claim 19 (original): The water control fixture according to claim 11, wherein said housing has a hot  
17 water channel interconnecting said supply of hot water with said interior chamber and a cold water  
18 channel interconnecting said interior chamber with said supply of cold water, said bypass valve  
19 configured to bypass water from said hot water channel to said cold water channel.

20  
21 Claim 20 (original): The water control fixture according to claim 11, wherein said housing is  
22 disposed at the rear of said fixture.

23  
24 Claim 21 (currently amended): The water control fixture according to claim 11, wherein said  
25 housing is a threaded pipe integral with said fixture.

1 Claim 22 (original): The water control fixture according to claim 11, wherein said housing is  
2 adapted for use as a dual handle, single spout water control fixture by adding a side port for the  
3 discharge of water from said fixture.

4  
5 Claim 23 (original): The water control fixture according to claim 1, wherein said bypass valve is  
6 disposed in said operating valve.

7  
8 Claim 24 (original): The water control fixture according to claim 23, wherein said operating valve  
9 comprises a moveable valving ball having one or more inlet ports thereon for selective communication  
10 with said supply of hot water and said supply of cold water.

11  
12 Claim 25 (original): The water control fixture according to claim 24, wherein said ball has an  
13 annular compartment and an inner compartment in the interior of said ball.

14  
15 Claim 26 (original): The water control fixture according to claim 25, wherein said actuating element  
16 is disposed in said inner compartment and said annular compartment is in fluid communication with  
17 said one or more inlet ports on said ball.

18  
19 Claim 27 (original): The water control fixture according to claim 26 further comprising one or more  
20 bypass ports on said ball, said bypass ports in fluid communication with said inner compartment to  
21 allow said bypass valve to bypass fluid from said supply of hot water to said supply of cold water.

22  
23 Claim 28 (original): The water control fixture according to claim 23, wherein said operating valve  
24 comprises a replaceable cylindrical valving cartridge having a moveable valving spool.

1 Claim 29 (original): The water control fixture according to claim 28, wherein said actuating element  
2 is disposed in said moveable valving spool.

3  
4 Claim 30 (original): The water control fixture according to claim 29, wherein said actuating element  
5 has a shuttle connected to a piston actuated by an actuator.

6  
7 Claim 31 (original): The water control fixture according to claim 30, wherein said shuttle has an  
8 integral elastomer sleeve.

9  
10 Claim 32 (original): A water control fixture, comprising:

11 an operating valve in said water control fixture for controlling the flow of water from a  
12 pressurized supply of hot water; [and]

13 a housing having an interior chamber, said interior chamber hydraulically connected to  
14 said supply of hot water, and

15 a thermostatically controlled bypass valve disposed in said [water control fixture]  
16 interior chamber, said bypass valve having a thermally sensitive actuating element therein configured  
17 to bypass water from said supply of hot water to a supply of cold water until the temperature of the  
18 water is at a preset level, said actuating element configured to operatively seal said bypass valve, said  
19 bypass valve disposed in a cartridge configured to fit within said interior chamber.

20  
21 Claim 33 (cancelled)

22  
23 Claim 34 (cancelled)

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25 Claim 35 (original): The water control fixture according to claim [33] 32, wherein said bypass valve  
26 is removably disposed in said interior chamber.

1 Claim 36 (original): The water control fixture according to claim 35, wherein said bypass valve is  
2 removable through the top of said water control fixture.

3  
4 Claim 37 (original): The water control fixture according to claim [33] 32, wherein said housing has  
5 a hot water channel interconnecting said supply of hot water with said interior chamber and a cold  
6 water channel interconnecting said interior chamber with said supply of cold water, said bypass valve  
7 configured to bypass water from said hot water channel to said cold water channel.

8  
9 Claim 38 (cancelled)

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11 Claim 39 (cancelled)

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13 Claim 40 (cancelled)

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15 Claim 41 (cancelled)

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17 Claim 42 (cancelled)

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19 Claim 43 (cancelled)

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21  
22 Claims 44-56 (previously cancelled)

1 Claim 57 (previously allowed) : A water control fixture, comprising:  
2 an operating valve in said water control fixture for controlling the flow of water from a  
3 pressurized supply of hot water;  
4 a thermostatically controlled bypass valve disposed in said water control fixture, said  
5 bypass valve having a thermally sensitive actuating element therein configured to bypass water from  
6 said supply of hot water to a supply of cold water until the temperature of the water is at a preset  
7 level, said actuating element configured to operatively seal said bypass valve; and  
8 a screen disposed in a hot water inlet of said water control fixture so as to be cleaned  
9 by the movement of water from said pressurized supply of hot water when said operating valve is  
10 open.  
11

12 Claim 58 (previously allowed): The water control fixture according to claim 57 further comprising a  
13 housing with an interior chamber disposed in said housing, said interior chamber hydraulically  
14 connected to said supply of hot water, said bypass valve disposed in said interior chamber.  
15

16 Claim 59 (previously allowed): The water control fixture according to claim 58, wherein said bypass  
17 valve is disposed in a cartridge configured to fit within said interior chamber.  
18

19 Claim 60 (previously allowed): The water control fixture according to claim 58, wherein said bypass  
20 valve is removably disposed in said interior chamber.  
21

22 Claim 61 (previously allowed): The water control fixture according to claim 60, wherein said bypass  
23 valve is removable through the top of said water control fixture.  
24  
25  
26

1 Claim 62 (previously allowed): The water control fixture according to claim 58, wherein said  
2 housing has a hot water channel interconnecting said supply of hot water with said interior chamber  
3 and a cold water channel interconnecting said interior chamber with said supply of cold water, said  
4 bypass valve configured to bypass water from said hot water channel to said cold water channel.  
5

6 Claim 63 (previously allowed): The water control fixture according to claim 57, wherein said bypass  
7 valve is disposed in said operating valve.  
8

9 Claim 64 (previously allowed): The water control fixture according to claim 63, wherein said  
10 operating valve comprises a moveable valving ball having one or more inlet ports thereon for  
11 selective communication with said supply of hot water and said supply of cold water, said ball having  
12 an annular compartment and an inner compartment in the interior of said ball.  
13

14 Claim 65 (previously allowed): The water control fixture according to claim 64, wherein said  
15 actuating element is disposed in said inner compartment and said annular compartment is in fluid  
16 communication with said one or more inlet ports on said ball.  
17

18 Claim 66 (previously allowed): The water control fixture according to claim 65 further comprising  
19 one or more bypass ports on said ball, said bypass ports in fluid communication with said inner  
20 compartment to allow said bypass valve to bypass fluid from said supply of hot water to said supply  
21 of cold water.  
22

23 Claim 67 (previously allowed): The water control fixture according to claim 64, wherein said  
24 operating valve comprises a replaceable cylindrical valving cartridge having a moveable valving  
25 spool, said actuating element disposed in said moveable valving spool.  
26



1 Claim 68 (previously allowed): The water control fixture according to claim 67, wherein said  
2 actuating element has a shuttle connected to a piston actuated by an actuator and said shuttle has an  
3 integral elastomer sleeve.

4  
5 Claim 69 (new): A water control fixture, comprising:

6 an operating valve in said water control fixture for controlling the flow of water from a  
7 pressurized supply of hot water;

8 a thermostatically controlled bypass valve disposed in said water control fixture, said  
9 bypass valve having a thermally sensitive actuating element therein configured to bypass water from  
10 said supply of hot water to a supply of cold water until the temperature of the water is at a preset  
11 level; and

12 a screen disposed in a hot water inlet of said water control fixture so as to be cleaned  
13 by the movement of water from said pressurized supply of hot water when said operating valve is  
14 open.

15  
16 Claim 70 (new): The water control fixture according to claim 69, wherein said actuating element  
17 comprises an actuating body and a rod member, said rod member configured to operatively extend  
18 from said actuating body and seal said bypass valve.

19  
20 Claim 71 (new): The water control fixture according to claim 70, wherein said rod member has a  
21 reduced diameter section to allow for lime buildup.

22  
23 Claim 72 (new): The water control fixture according to claim 70 further comprising a sharp  
24 cornered guide bore on said actuating body.

1 Claim 73 (new): The water control fixture according to claim 72, wherein said rod member has a  
2 reduced diameter section to allow for lime buildup.

3  
4 Claim 74 (new): The water control fixture according to claim 69, wherein said actuating element is a  
5 wax-filled cartridge actuator.

6  
7 Claim 75 (new): The water control fixture according to claim 69 further comprising a bias spring  
8 disposed in said bypass valve between said valve seat and said actuating body to urge said rod  
9 member toward said actuating body to open said valve seat.

10  
11 Claim 76 (new): The water control fixture according to claim 69 further comprising a check valve  
12 disposed in said bypass valve.

13  
14 Claim 77 (new): A water control fixture, comprising:

15 an operating valve in said water control fixture for controlling the flow of water from a  
16 pressurized supply of hot water;

17 a thermostatically controlled bypass valve disposed in said water control fixture, said  
18 bypass valve having a thermally sensitive actuating element therein configured to bypass water from  
19 said supply of hot water to a supply of cold water until the temperature of the water is at a preset  
20 level; and

21 a housing having an interior chamber disposed in said housing, said interior chamber  
22 hydraulically connected to said supply of hot water, said bypass valve disposed in a cartridge in said  
23 interior chamber.

1 Claim 78 (new): A water control fixture, comprising:

2 an operating valve in said water control fixture for controlling the flow of water from a  
3 pressurized supply of hot water;

4 a thermostatically controlled bypass valve disposed in said water control fixture, said  
5 bypass valve having a thermally sensitive actuating element therein configured to bypass water from  
6 said supply of hot water to a supply of cold water until the temperature of the water is at a preset  
7 level; and

8 a housing having an interior chamber disposed in said housing, said interior chamber  
9 hydraulically connected to said supply of hot water, said bypass valve removably disposed in said  
10 interior chamber, said bypass valve removable through the top of said water control fixture.

11  
12 Claim 79 (new): A water control fixture, comprising:

13 an operating valve in said water control fixture for controlling the flow of water from a  
14 pressurized supply of hot water;

15 a thermostatically controlled bypass valve disposed in said water control fixture, said  
16 bypass valve having a thermally sensitive actuating element therein configured to bypass water from  
17 said supply of hot water to a supply of cold water until the temperature of the water is at a preset  
18 level; and

19 a housing disposed at the rear of said fixture, said housing having an interior chamber  
20 disposed in said housing, said interior chamber hydraulically connected to said supply of hot water,  
21 said bypass valve disposed in said interior chamber.

22  
23 Claim 80 (new): A water control fixture, comprising:

24 an operating valve in said water control fixture for controlling the flow of water from a  
25 pressurized supply of hot water;

1 a thermostatically controlled bypass valve disposed in said water control fixture, said  
2 bypass valve having a thermally sensitive actuating element therein configured to bypass water from  
3 said supply of hot water to a supply of cold water until the temperature of the water is at a preset  
4 level; and

5 a housing having an interior chamber disposed in said housing, said housing a threaded  
6 pipe integral with said fixture, said interior chamber hydraulically connected to said supply of hot  
7 water, said bypass valve disposed in said interior chamber.

8  
9 Claim 81 (new): A water control fixture, comprising:

10 an operating valve in said water control fixture for controlling the flow of water from a  
11 pressurized supply of hot water;

12 a thermostatically controlled bypass valve disposed in said water control fixture, said  
13 bypass valve having a thermally sensitive actuating element therein configured to bypass water from  
14 said supply of hot water to a supply of cold water until the temperature of the water is at a preset  
15 level; and

16 a housing having an interior chamber disposed in said housing, said interior chamber  
17 hydraulically connected to said supply of hot water, said bypass valve disposed in said interior  
18 chamber, said housing adapted for use as a dual handle, single spout water control fixture by adding a  
19 side port for the discharge of water from said fixture.

20  
21 Claim 82 (new): A water control fixture, comprising:

22 an operating valve in said water control fixture for controlling the flow of water from a  
23 pressurized supply of hot water; and

24 a thermostatically controlled bypass valve disposed in said operating valve, said bypass  
25 valve having a thermally sensitive actuating element therein configured to bypass water from said  
26 supply of hot water to a supply of cold water until the temperature of the water is at a preset level.

1 Claim 83 (new): The water control fixture according to claim 82, wherein said operating valve  
2 comprises a moveable valving ball having one or more inlet ports thereon for selective communication  
3 with said supply of hot water and said supply of cold water.

4  
5 Claim 84 (new): The water control fixture according to claim 83, wherein said ball has an annular  
6 compartment and an inner compartment in the interior of said ball.

7  
8 Claim 85 (new): The water control fixture according to claim 84, wherein said actuating element is  
9 disposed in said inner compartment and said annular compartment is in fluid communication with said  
10 one or more inlet ports on said ball.

11  
12 Claim 86 (new): The water control fixture according to claim 85 further comprising one or more  
13 bypass ports on said ball, said bypass ports in fluid communication with said inner compartment to  
14 allow said bypass valve to bypass fluid from said supply of hot water to said supply of cold water.

15  
16 Claim 87 (new): The water control fixture according to claim 82, wherein said operating valve  
17 comprises a replaceable cylindrical valving cartridge having a moveable valving spool.

18  
19 Claim 88 (new): The water control fixture according to claim 87, wherein said actuating element is  
20 disposed in said moveable valving spool.

21  
22 Claim 89 (new): The water control fixture according to claim 88, wherein said actuating element has  
23 a shuttle connected to a piston actuated by an actuator.

24  
25 Claim 90 (new): The water control fixture according to claim 89, wherein said shuttle has an  
26 integral elastomer sleeve.

1 Claim 91 (new): A water control fixture, comprising:

2 an operating valve in said water control fixture for controlling the flow of water from a  
3 pressurized supply of hot water;

4 a housing having an interior chamber disposed therein, said interior chamber  
5 hydraulically connected to said supply of hot water; and

6 a thermostatically controlled bypass valve removably disposed in said interior chamber,  
7 said bypass valve having a thermally sensitive actuating element therein configured to bypass water  
8 from said supply of hot water to a supply of cold water until the temperature of the water is at a  
9 preset level, said actuating element configured to operatively seal said bypass valve, said bypass valve  
10 removable through the top of said water control fixture.

11  
12 Claim 92 (new): The water control fixture according to claim 91, wherein said housing has a hot  
13 water channel interconnecting said supply of hot water with said interior chamber and a cold water  
14 channel interconnecting said interior chamber with said supply of cold water, said bypass valve  
15 configured to bypass water from said hot water channel to said cold water channel.

16  
17 Claim 93 (new): A water control fixture, comprising:

18 an operating valve in said water control fixture for controlling the flow of water from a  
19 pressurized supply of hot water; and

20 a thermostatically controlled bypass valve disposed in said operating valve, said bypass  
21 valve having a thermally sensitive actuating element therein configured to bypass water from said  
22 supply of hot water to a supply of cold water until the temperature of the water is at a preset level,  
23 said actuating element configured to operatively seal said bypass valve.

1 Claim 94 (new): The water control fixture according to claim 93 further comprising a housing  
2 disposed in said operating valve, said housing having an interior chamber therein, said interior  
3 chamber hydraulically connected to said supply of hot water, said bypass valve disposed in said  
4 interior chamber.

5  
6 Claim 95 (new): The water control fixture according to claim 94, wherein said bypass valve is  
7 disposed in a cartridge configured to fit within said interior chamber.

8  
9 Claim 96 (new): The water control fixture according to claim 94, wherein said bypass valve is  
10 removably disposed in said interior chamber.

11  
12 Claim 97 (new): The water control fixture according to claim 96, wherein said bypass valve is  
13 removable through the top of said water control fixture.

14  
15 Claim 98 (new): The water control fixture according to claim 94, wherein said housing has a hot  
16 water channel interconnecting said supply of hot water with said interior chamber and a cold water  
17 channel interconnecting said interior chamber with said supply of cold water, said bypass valve  
18 configured to bypass water from said hot water channel to said cold water channel.